

**ABSTRACT OF THE DISCLOSURE**

A data communication network for DiffServ communications has a software library added to clients connected to a data communication network having a DiffServ-enabled edge router. When an application running on a client system wishes to make a remote procedure call to a remote server system on another network, it makes its usual call for RPC invocation using the software library. This RPC call is intercepted by a protocol layer interposed between the application layer and the underlying RPC transport code. The protocol layer detects when an RPC call is being made and can determine the identity of the calling procedure as well. The library makes a side channel communication to the edge router to provide this information to the edge router or alternative service decider, which then makes use of this data when performing DiffServ classification for packets transmitted during the course of the call.